

**PERYMENIUM BASASEACHICANUM (ASTERACEAE, HELIANTHEAE), A
NEW SPECIES FROM CHIHUAHUA, MEXICO**

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ABSTRACT

A new species, *Perymenium basaseachicanum* B.L. Turner, *spec. nov.*, is described. It is known by numerous recent collections and is seemingly confined to southwestern Chihuahua. It belongs to the herbaceous elements of *Perymenium* and is closely related to *P. oxycarphum*. A key to the four herbaceous species of *Perymenium* is provided, along with a map showing the distribution of *P. basaseachicanum*, and a photograph of the holotype.

KEY WORDS: Asteraceae, *Perymenium*, México, Chihuahua, systematics

Perymenium is a relatively large genus, containing approximately 40 species, most of these shrubby elements largely confined to México (Fay 1978). A few species of *Perymenium* are low perennial herbs, the stems slender and dying back after each growing season, arising anew from swollen tuber-like roots. With the addition of *P. basaseachicanum*, described below, the genus is now known to have four such herbaceous species, one of these *P. bupthalmoides* DC. having five morphogeographical varieties (Turner 1988). The following key will distinguish these four species, and Figure 2 shows the distribution of *P. basaseachicanum*, which does not overlap that of the other taxa, nor do the several species appear to intergrade.

KEY TO HERBACEOUS SPECIES OF *PERYMENIUM*

1. Involucral bracts 2-seriate, subequal, mostly (6-)7-12 mm long. *P. bupthalmoides*
1. Involucral bracts 3-4 seriate, imbricate to subimbricate, mostly 4-6 mm long.(2)
 2. Leaves elliptic, coriaceous, widest near the middle; Jalisco. *P. jaliscoense*
 2. Leaves ovate, herbaceous, widest near the base; Pacific slopes (Oaxaca to Sonora) and western Chihuahua.....(3)

3. Leaves with blades ovate to ovate-elliptic, 1-2 times as long as wide, the petioles 4-20 mm long, widespread.....*P. oxycarphum*
 3. Leaves with blades ovate-lanceolate, 2-3 times as long as wide, the petioles 0.5-2.0 mm long; Chihuahua. *P. basaseachicanum*

PERYMENIUM BASASEACHICANUM B.L. Turner, *spec. nov.* Figure 1.

TYPE: MEXICO. Chihuahua: Cascada Basaseachic, South Overview to Rancho San Lorenzo Hotel, pine-oak woodlands in "sterile tuff" and rich meadows, 2150 m, 22 Jul 1986, *P.S. Martin, et al. s.n.* (HOLOTYPE: TEX!; Isotype: ARIZ).

Simile *P. oxycarpho* S.F. Blake sed foliis medicalium ovatis-lanceolatis (vice foliorum ovatorum aut ovatorum-ellipticorum), 2-3plo longioribus quam latioribus (vice 1-2plo), et petiolis 0.5-2.0 mm longis (vice 4-20 mm longis).

Perennial herbs 30-50 cm high. Stems erect, arising from underground, tuber-like roots, sparsely to moderately strigose. Midstem leaves mostly 3-5 cm long, 1.0-2.5 cm wide; petioles 0.5-2.0 mm long; blades ovate lanceolate, 3-nervate from the base, 2-3 times as long as wide, sparsely to moderately hispidulous below with rough hairs, the margins remotely dentate. Heads 1-3(-5) in terminal open cymes, the ultimate peduncles slender, 3-10 cm long. Involucres 3-4 seriate, 4-6 mm high, 6-10 mm wide (pressed); bracts broadly ovate, coarsely short-hispid, scarcely herbaceous, except for the short obtuse apices. Receptacles convex, 2-3 mm across. Receptacular bracts folded-lanceolate, persistent, their apices acute, hispidulous. Ray florets, 8-11, pistillate, fertile; ligules yellow, 8-10 mm long, ca. 2 mm wide. Disk florets 30-40 (estimated), yellow, 4-5 mm long, the narrow throat ca. as long as the limb, the lobes 5, ca. 0.7 mm long. Achenes ca. 3 mm long; pappus of ca. 20 deciduous bristles 1-3 mm long.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Chihuahua: Mpio. Guachochic, NW of Norogachic at airport, ca. 1950 m, 23 Aug 1978, *Bye 8819* (NMSU,TEX); Mpio. Bocoyna, mesa W of Creel between Creel and Río Oteros, ca. 2360 m, 16 Oct 1977, *Bye & Weber 8204* (LL); Mpio. Guadalupe y Calvo, NW side of Cerro Mohinora, ca. 12.5 m SW of Guadalupe y Calvo, 2470 m, *Nesom 6487* (TEX); Cascada Basaseachic, 1 Oct 1986, *Martin, et al. 42* (NMSU); 37.6 km SW of El Vergel on road to Guadalupe y Calvo, ca. 2500 m, 27 Aug 1983, *Nesom 4949* (TEX); Norogachi, ca. 5000 ft., 18 Jul 1955, *Pennington 678* (TEX); Cascada Basaseachic, ca. 1 km airline S of Cascada in "thin soil over rock at overlook," ca. 2100 m, 3 Oct 1986, *Spellenberg, et al. 9270* (TEX).

This species is superficially similar to *Perymenium bupthalmoides* var. *tenellum* (A. Gray) McVaugh, but is readily distinguished from the latter by its small 3-4 seriate, subimbricate to imbricate involucres. Fay (1978) examined only one sheet of the taxon (*Pennington 678* [TEX]) annotating this as "probably" *P. b.* var. *tenellum*. I was content with this name until numerous additional collections showed that the involucral characters are more like those of *P. oxycarphum* S.F. Blake, a widespread herbaceous taxon of the Pacific coast slopes (Turner 1987), distributed from Oaxaca to Sonora, and readily distinguished from *P. basaseachicanum* by its broadly ovate blades borne upon well-defined petioles, as noted in the above key.

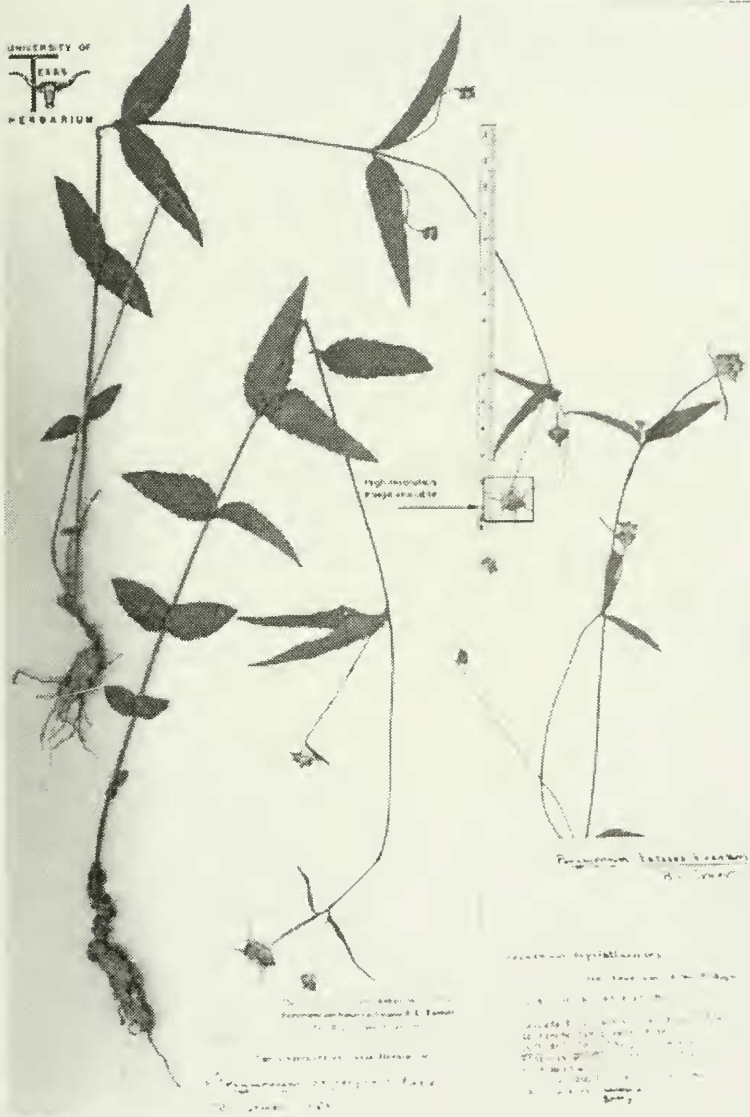


Figure 1. Scanning photograph of *Perymenium basaseachicanum* (holotype).



Figure 2. Distribution of *Perymenium basaseachicanum* (based upon collections at LL, TEX).

It should also be noted here that label data on the Pennington collection (cited above) states that the Tarahumar name for the taxon is NAWABORI (a generic name used for plants having edible roots) and that the Indians ate these, either "cooked, or raw."

ACKNOWLEDGMENTS

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